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Umatilla National Forest

Draft Environmental Impact Statement

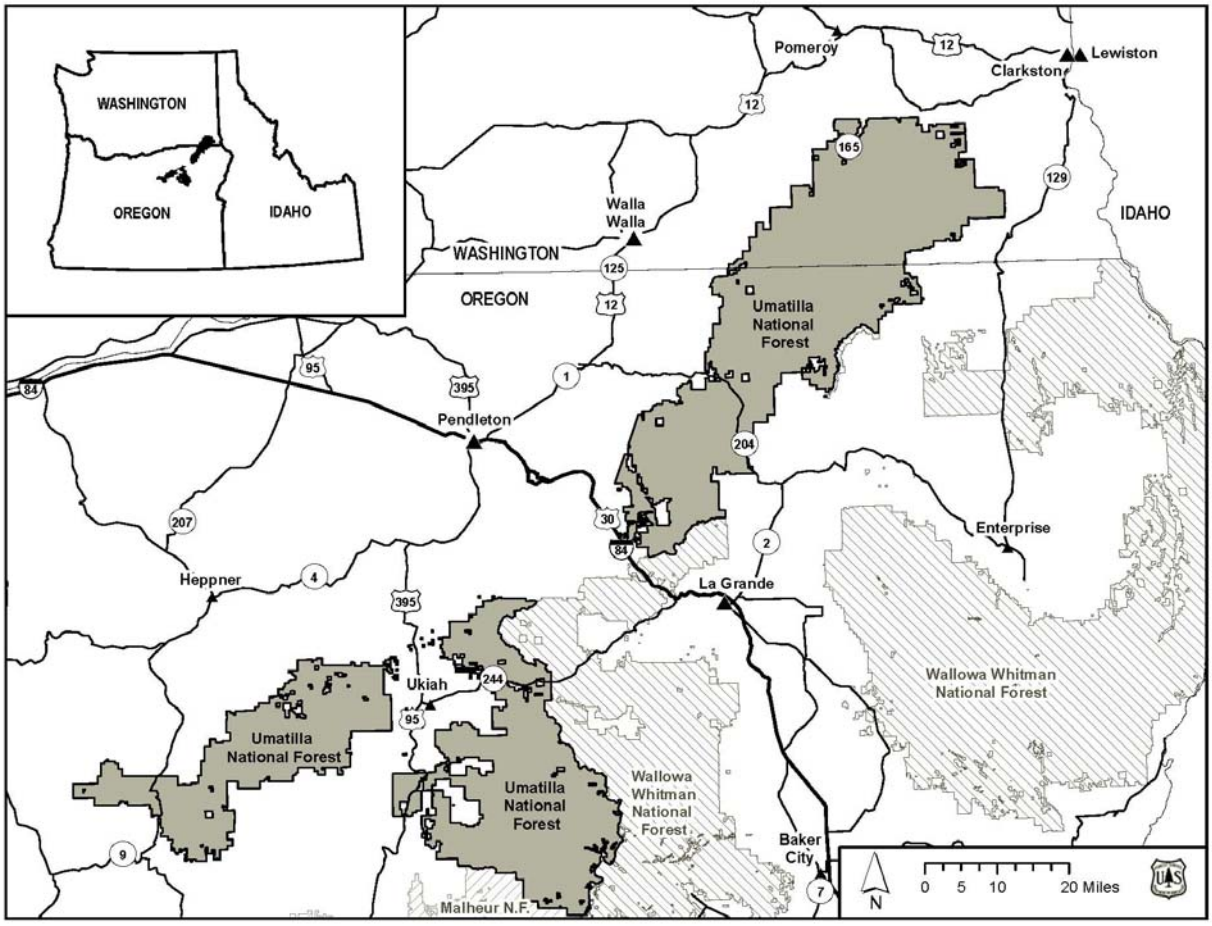
Invasive Plants Treatment Project

Volume I

Counties: Asotin, Columbia, Garfield, and Walla Walla in Washington; Grant, Morrow, Umatilla, Union, Wallowa, and Wheeler in Oregon

Picture Courtesy of Julie Laufman

Umatilla National Forest Vicinity Map



Invasive Plant Treatment Project
Draft Environmental Impact Statement

Asotin, Columbia, Garfield, and Walla Walla Counties in Washington; Grant, Morrow, Umatilla, Union, Wallowa, and Wheeler Counties in Oregon

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This DEIS is made available for a 45-day Comment Period, under the provisions of the National Environmental Policy Act (40 CFR 1500-1508), and Notice, Comment, and Appeal Procedures for National Forest System Projects and Activities, (36 CFR 215). The Forest Service will accept comments as provided in §215.6(a)(4), beginning on the day following the date of publication of the Notice of Availability (NOA) in the **Federal Register**. This day is scheduled to be June 22, 2007. In order to be considered in the Final Environmental Impact Statement, substantive comments must be received within the formal comment period. The official comment period timelines will be posted in the Federal Register, and on the Umatilla National Forest's Web site (http://www.fs.fed.us/r6/uma/projects/).

Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record on this Proposed Action and will be available for public inspection. Comments submitted anonymously will be accepted and considered; however, those who only comment anonymously will not have standing to appeal the subsequent decision under 36 CFR Part 215. Reviewers must provide the Forest Service with their comments during the review period of this Draft Environmental Impact Statement. This will enable the Forest Service to analyze and respond to the comments at one time and to use information acquired in the preparation of the final environmental impact statement, thus avoiding undue delay in the decision-making process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to the reviewer's position and contentions. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement. City of Angoon, v. Hodel (9th Circuit, 1986) and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Comments on the draft environmental impact statement should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

Abstract

This Draft Environmental Impact Statement (DEIS) discloses the effects of treating invasive plants on the Umatilla National Forest. Invasive plant species were identified by the Chief of the Forest Service as one of the four threats to forest health (for more information see http://www.fs.fed.us/project/four-threats). Invasive plants are displacing native plants, destabilizing streams, reducing the quality of fish and wildlife habitat; and degrading natural areas.

Strong public concern has been expressed regarding Forest Service response to invasive plants. Several organizations and individuals have offered to cooperate with the Forest Service in this endeavor. The Forest Service is responding to a crucial need for timely containment, control, and/or eradication of invasive plants, including those that are currently known and those discovered in the future. The purpose of this project is to treat invasive plants in a cost-effective manner that complies with environmental standards.

Approximately 24,649 acres are currently estimated to need treatment, including but not limited to spotted and diffuse knapweed, yellow starthistle, hound's tongue, dalmation and yellow toadflax, scotch thistle, and rush skeletonweed. This Draft Environmental Impact Statement (DEIS) also analyzes the effects of treating new infestations and new invasive species presently unknown or non-existent, but discovered during the life of this project. This DEIS includes detailed consideration of four alternatives:

- Alternative A, the No Action Alternative, would continue to implement treatments according to existing plans; no new invasive plant treatments would be approved.
- Alternative B, the Proposed Action Alternative, would apply an initial prescription, along with re-treatment in subsequent years, until the site was restored with desirable vegetation. Herbicide treatments would be part of the initial prescription for most sites, but the use of herbicides would be expected to decline in subsequent entries as populations became small enough to treat manually or mechanically. Ongoing inventories would confirm the location of specific invasive plants and effectiveness of past treatments.

Two action alternatives were developed in response to public issues related to herbicide use:

- Alternative C, No Broadcast Spraying in Riparian Areas, would not allow broadcast applications of herbicides in riparian areas, however; spot spraying or hand applications such as wiping or wicking of herbicides would be allowed. Except for this limitation imposed on broadcast spraying, the features of this alternative are the same as Alternative B. This alternative addresses human health issues associated with contamination of drinking water supplies from herbicide drift, as well as potential impacts to non-target wildlife, plant species, soils, aquatic biota and riparian ecosystems. Alternative C would minimize herbicide impacts, but would increase treatment costs and decrease treatment effectiveness.
- Alternative D, No Aerial Application, would eliminate the option to aerially apply herbicides. This addresses the issues expressed regarding potential effects of herbicide drift to human health through drinking water supplies, also to non-target wildlife and plant species, soils, aquatic biota and riparian ecosystems, both in the area being treated, and areas adjacent to it. Alternative D would minimize herbicide impacts, but would increase treatment costs and decrease treatment effectiveness. Treatment of some sites would not occur due to inaccessibility or because access to the site is determined unsafe. Except for this limitation imposed on aerial spraying, the features of this alternative are the same as Alternative B.

The Forest Service Preferred Alternative is the Proposed Action (Alternative B).

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List of Acronyms

APHIS	Animal and Plant Health Inspection Service
ATV	All terrain vehicle
BA	Biological Assessment
BE	Biological Evaluation
BECA	Bald Eagle Consideration Area
BEMA	Bald Eagle Management Area
BLM	Bureau of Land Management
BO	Biological Opinion
BPA	Bonneville Power Authority
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
DN	Decision Notice
DO	Dissolved oxygen
DPS	Distinct Population Segments
EA	Environmental Assessment
EEC	Expected exposure concentration
EDRR	Early detection rapid response
EFH	Essential fish habitat
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESU	Ecologically Sustainable Unit
FDA	Food and Drug Administration
FEIS	Final Environmental Impact Statement
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FOSS	Federal OSHA Safety Standard
FS	Forest Service
FSH	Forest Service Handbook
FSM	Forest Service Manual
FWS	United States Fish and Wildlife Service
GIS	Geographical information system
GLEAMS	Groundwater Loading Affects of Agricultural Management Systems
GPS	Global positioning system
HQ	Hazard quotient
HUC	Hydrologic Unit Codes
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IDT	Interdisciplinary Team
INFISH	Inland Native Fish Strategy
IWM	Integrated weed management
LAU	Lynx analysis units
LCAS	Lynx Conservation Assessment and Strategy
LOAEL	Lowest observed adverse effect level
LOC	Level of concern
LOP	Limited operating period

LRMP	Land and Resources Management Plan
LWD	Large Woody Debris
LWM	Large woody material
MIG	Minnesota IMPLAN Group
MIS	Management Indicator Species
MPI	Matrix of Pathways and Indicators
MSA	Magnuson Stevens Act
NEPA	National Environmental Policy Act
NF	National Forest
NFMA	National Forest Management Act
NFJD	North Fork John Day
NFS	National Forest System
NMFS	National Marine Fisheries Service
NOA	Notice of Availability
NOAEL	No observed adverse effect level
NOEC	No observable effect concentration
NOI	Notice of Intent
NPE	Nonylphenol Polyethoxylate
NVUM	National Visitors Use Monitoring
ODA	Oregon Department of Agriculture
ODEQ	Oregon Department of Environmental Quality
ODFW	Oregon Department of Fish and Wildlife
OHV	Off-highway vehicles
OR	Oregon
ORV	Off-road vehicles
PA	Proposed Action
PACFISH	Pacific Native Fish Strategy
PCE	Primary Constituent Elements
PDF	Project design feature
PETS	Proposed Endangered Threatened and Sensitive
PNV	Present Net Value
PNW	Pacific Northwest
POEA	Polyoxyethylene alkylamine
PVG	Potential vegetation groups
R6	Forest Service Region Six
RHCA	Riparian Habitat Conservation Area
RM	River mile
RMO	Riparian management objective
ROD	Record of Decision
SERA	Syracuse Environmental Research Associates, Inc
SOLI	Species of local interest
SRI	Soils Resource Inventory
TAC	Technical Advisory Committee
TCP	trichloro-2-pyridinol
TDS	Total dissolved solids
TES	Threatened, Endangered and Sensitive
TMDL	Total maximum daily load
TNC	The Nature Conservancy
USDA	United States Department of Agriculture

USDI	United States Department of Interior
USFS	United States Forest Service
USGS	United States Geological Survey
WA	Washington
WDFW	Washington Department of Fish and Wildlife
WSDOA	Washington State Department of Agriculture
WQMP	Water Quality Management Plan
WSR	Wild and Scenic River

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Draft Environmental Impact Statement
Umatilla National Forest
Invasive Plants Treatment Project

Summary

Land managers for the Umatilla National Forest propose to treat invasive plants and restore treated sites (seeding/mulching/planting). Invasive species were identified by the Chief of the Forest Service as one of the four threats to forest health (for more information see http://www.fs.fed.us/projects/four-threats). Invasive plants are displacing native plants and degrading natural areas, potentially destabilizing streams and reducing the quality of fish and wildlife habitat. Our integrated weed management program includes a) herbicide and non-herbicide treatment of existing infestations, b) early detection and rapid response to new infestations, c) restoration of treated sites, d) reducing the rate of spread of invasives through adopting prevention practices, and e) interagency and public education and coordination.

The focus of this Draft Environmental Impact Statement (DEIS) is on the part of our program related to treatment and restoration of invasive plant sites on the Umatilla National Forest. New invasive plant management direction has recently been approved by the Pacific Northwest (R6) Regional Forester, allowing for a wider range of herbicide options and specific treatment and restoration standards (USDA 2005b, the Pacific Northwest Invasive Plant Program Record of Decision, referred to herein as the R6 2005 ROD).

With this project, the Forest Service is responding to the need for timely containment, control, and/or eradication of invasive plants, including those that are currently known and those discovered in the future. Strong public concern has been expressed regarding Forest Service response to invasive plants. Several organizations and individuals have offered to cooperate with the Forest Service in this endeavor.

The purpose of this project is to treat invasive plants in a cost-effective manner that complies with the new management direction. Proposed treatment methods include a limited amount of aerial spraying, herbicide broadcast along roadsides, and spot and selective herbicide treatments that target individual invasive plants in combination with manual, mechanical and cultural (fertilization, soil amendments, and/or competitive planting) treatments. Biological control is an ongoing process.

Treatments are proposed for existing or unpredictable new infestations including new plant species that currently are not found on the Forest. Project Design Features (PDFs) would be applied to new infestations that occur within treatment areas, or in similar sites outside treatment areas, to ensure that treatments are within the scope of this EIS.

Four alternatives are considered: The No Action (also referred to as Alternative A), the Proposed Action (also referred to as Alternative B), and two additional action alternatives, Alternative C, which restricts broadcast spraying of herbicides in riparian areas, and Alternative D, which does not allow aerial spraying anywhere.

In the No Action Alternative (Alternative A), no new treatments beyond those previously approved in the 1995Umatilla National Forest Environmental Assessment for the Management of Noxious Weeds would be implemented. Under the 1995 EA, invasive plant treatments would be limited to approximately 2,771 acres.

The "95 EA" approved use of herbicides on 587 sites (1391 acres) on the Umatilla National Forest (USDA 1995). Amendments to this decision added an additional 59 sites (383 acres) approved for chemical treatments (USDA 1998). The total area identified for treatment using all methods was 3154 acres. The total number of sites approved for chemical treatments represents 36 percent of the total number of sites presently mapped. New infestations have been and would continue to be treated with manual and mechanical methods. The 1995 EA (as amended) allowed for biological treatments on 1,339 acres, manual treatments on approximately 41 acres, and a combination of manual, chemical, and cultural methods on an estimated 1,744 acres. Herbicide applications would utilize spot or ground based broadcast methods utilizing Glyphosate, Dicamba, or Picloram. However, the 2005 Regional Invasive Plant FEIS ROD does not allow the use of Dicamba, so herbicide use is limited to the other two chemicals listed. Aerial application of herbicides is not allowed under the current program.

Current inventory indicates there are approximately 25,000 acres of invasive plant infestations on the Forest in 2,069 invasive plant sites. The Proposed Action (Alternative B) is the Forest Service Preferred Alternative, and would approve an effective range of treatment methods according to Project Design Features that minimize the risk of adverse effects from herbicide and other types and methods of treatment (Tables 6, 7, 8 and 9 in Chapter 2).

Proposed treatments include chemical, physical and biological methods. Potential treatments based on existing mapped sites (See Figures 3-6 in Chapter 2) include:

- Approximately 3,915 acres treated with biological or physical methods
- Approximately 17,301 acres of uplands would utilize chemical, physical, or biological methods
- Approximately 3,392 acres of riparian areas would be treated with chemical, physical, or biological methods
- Physical methods only would treat 41 acres

Of these acres, 675 acres are proposed for aerial chemical application (See Figure 7 in Chapter 2 for treatment sites proposed for aerial application).

There is concern that detrimental effects could occur from broadcast spraying herbicide chemical in riparian areas. Alternative C (See Chapter 2 for a full description) would not allow broadcast applications of herbicides in riparian areas. However, spot spraying, or hand applications like wiping or wicking of herbicides would be allowed.

There is concern that aerial application of herbicides could cause detrimental effects to areas targeted, and to adjacent areas where chemical drift could impact non-target environments. Alternative D (See Chapter 2 for a full description) would eliminate this concern by eliminating the option to aerially apply herbicides.

The analysis in the DEIS considers a range of treatments applied to a range of conditions throughout the road systems and other areas that are vectors of invasive plant spread. Project Design Features (Table 6 in Chapter 2) have been developed to limit the potential for adverse effects associated with treatments. Buffers (Tables 7, 8, and 9 in Chapter 2) would limit herbicide selection and method application to ensure exposures are below thresholds of concern for people and the environment.

This DEIS focuses on treatment of invasive plants and restoration of treated sites. It is tiered to the broader scale *Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants FEIS* (Regional Invasive Plant Program EIS), April 2005 along with its *Record of Decision*

(ROD) for Invasive Plant Program Management on October 11, 2005 (Regional Invasive Plant Program EIS, ROD), which addresses other aspects of the invasive plant management program including preventing invasive plant spread during land uses and management activities.

This project in no way attempts to diminish or modify other Umatilla National Forest programs. Each Forest program is responsible to manage activities in ways that will minimize the potential for invasives plants to become established and spread. With this understanding it is our firm belief that the result of this project acting in the context of past, present and foreseeable future actions will reduce the influence of invasive species. This would improve native plant communities, their ecologic functions and thereby improve overall forest health.